



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,003	03/15/2004	Jiro Shinkai	033035M144	6820
441	7590	02/28/2006	EXAMINER	
SMITH, GAMBRELL & RUSSELL, LLP			CHIEM, DINH D	
1850 M STREET, N.W., SUITE 800			ART UNIT	
WASHINGTON, DC 20036			PAPER NUMBER	
			2883	

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

P1V

Office Action Summary	Application No. 10/800,003	Applicant(s) SHINKAI ET AL.	
	Examiner Erin D. Chiem	Art Unit 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-6 and 9-14 is/are pending in the application.
 4a) Of the above claim(s) 9 and 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 9 and 12-14 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to the amendment filed on December 8, 2005. Claims 2, 7, and 8 are cancelled, claims 11-14 are newly added; currently, claims 1, 3-6, and 9-14 are pending. The examiner respectfully points out that the columns and lines citation is an extracted portion exemplifying an aspect of the reference disclosure and applicant should consider the reference in its entirety.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "third post" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. The examiner respectfully points out that the instance objection is also relevant to applicant's lexicography. Although applicants recite "a third post" but Fig. 1 and 10 are essentially the same (there are two posts and one sub-mount with an optical transmitting element mounted thereon). Therefore, in absence of *three* posts in the figures then there are essentially only two posts and one sub-mount regardless of the lexicography. Thus examiner considers the drawing may be lacking the block representation of the "third post." For the purpose of examination, the examiner considers "a third post" is applicant's choice of lexicography and thus "a second post" is the structural equivalent of "a third post." The examiner suggests in response to the current office action to amend the specification such that the lexicography would be more explicit or amend the drawings such that there are clearly three posts and one sub-mount.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Election/Restrictions

Newly submitted claims 12-14 and dependent claim 9 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: claim 1 recites—*said sub-mount being insulating with a first surface providing a metal film thereon*—and claim 12 recites—*said sub-mount being made of electrically conductive material*—is clearly indicative of two mutually exclusive species.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution

Art Unit: 2883

on the merits. Accordingly, claims 9 and 12-14 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Suzuki et al. (US Application 2003/0059177 A1 “Suzuki” hereinafter).

Regarding claim 1 Suzuki discloses a light-transmitting module having a sub-mount 16 and a first post 18 mounted on said conductive carrier 10. The sub-mount mounting said light-transmitting device thereon, and said first post being made of insulating material (wherein the light-transmitting device is made of semiconductor material, well-known to possess insulating property at low temperature) with a metal film on an upper surface thereof (implicitly disclosed by the gold wire 28 connected from the upper surface of the first post), electrically connecting the first electrode (gold wire 28 connecting to electrode 24) of said light-transmitting device to said metal film on said first post; testing the light-transmitting device by supplying current through a first probe (Fig. 8 reference number ‘63’ and ‘65’) touching the metal film 24; and cutting said electrical connection between said first electrode of said light transmitting device

Art Unit: 2883

and said metal film on said first post (this is an act of removing the probes 63 and 65 that supply the testing current).

Regarding claim 3, wherein the electrically connecting step further comprises a step of electrically connecting said second electrode 22 of said light-transmitting device to said carrier (see paragraph [0014] and Fig. 2).

Regarding claim 4, wherein said mounting step further comprises a step of mounting an electrically conductive second post 20 on said carrier, and said electrically connecting step further comprises a step of electrically connecting said second electrode 22 of said light-transmitting device to said second post (via wire pattern on the carrier 16 and exemplified by electrode 22).

Regarding claim 5, Suzuki teaches the step of installing the carrier into the housing (Fig. 4; S13) and mounting the lens on the carrier and aligning the lens with the laser diode by supplying the current to the laser diode through the probe touching the metal film (S12 –S15).

Regarding claim 10, the cathode electrode and the anode electrode is a well-accepted electricity-driving concept.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in view of Chang et al. (US 6,485,198 B1 “Chang” hereinafter).

Suzuki discloses all of the limitations in claim 1 and 5.

However, Suzuki does not disclose the driver IC is mounted on the same carrier.

Chang teaches an optoelectronic transceiver having integrated optical and electronic components. As shown in Fig. 1, the carrier 30 provides conductive surface for driver IC 40 and 42 to be mounted upon wherein the laser diode 40 is integrated into the driver IC chip 40; in other words, they are the same element (col. 4, lines 51-67) for the purpose of increasing high speed interconnection and reducing the module size.

Response to Arguments

Applicant's arguments filed December 8, 2005 have been fully considered but they are not persuasive. Applicant's only argument is directed to the lexicography of the "first post" not being disclosed by Suzuki because examiner's reference to Suzuki's label '18' is a laser diode.

Examiner respectfully agrees with applicant that the "first post" reference label 18 is a laser diode. However, applicant pointed out in the Specification, for example paragraph [0038], that the purpose of the posts is to provide accessibility for the probe to screen for electrical conductivity flowing through the light-transmitting device. Furthermore, applicant's light transmitting device is also mounted on a *post* or as applicant's preferred recitation "sub-mount." Firstly, the examiner respectfully point out that the Suzuki's reference reads upon applicant's claim limitation as provided in the rejection under 35 USC 102(e) above. Secondly, the examiner respectfully point out that Suzuki's reference also meets the functional objective of applicant's claimed invention. Suzuki's reference discloses the capability to condense the two posts as shown in element 18 and 20 that are electrically connected to the wire pattern (22, 24, 26) on the carrier 16. This wire pattern is also what allows Suzuki to easily access the electrical

Art Unit: 2883

connection points between the elements on the carrier to test for electrical conductive flow through the elements.

Applicant's arguments with respect to claims 1, 3-6, and 10-11 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erin D. Chiem whose telephone number is (571) 272-3102. The examiner can normally be reached on Monday - Thursday 9AM - 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2883

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Erin D Chiem
Examiner
Art Unit 2883

Frank G. Font
Supervisory Primary Examiner
Technology Center 2800